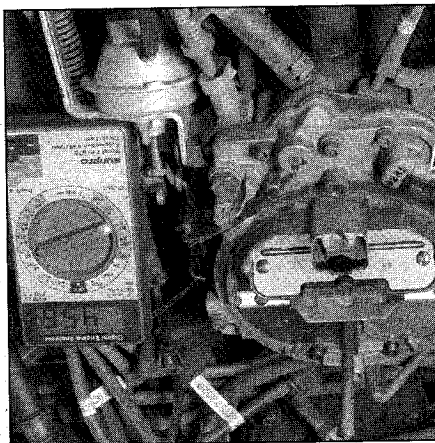
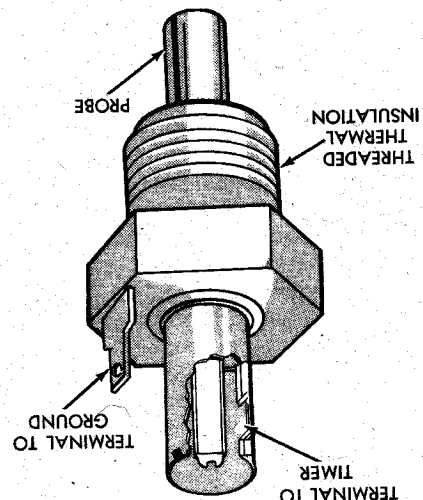


15.29 Tap on the intake manifold near the detonation sensor and confirm that the timing retards



15.24 The mixture-control solenoid connector location on the Rochester Quadrajet - the connector on all models is located on the carburetor air horn



15.20 Diagram of a typical charge temperature sensor

coated with this compound, but if an old sensor is removed and

reinstalled, recast the threads.

16 Install the sensor and tighten it securely.

17 Reconnect the electrical connector of the pigtail lead to the main engine wiring harness.

18 Lower the vehicle and reconnect the cable to the negative terminal of the battery.

Charge temperature switch (sensor)

Check

Refer to illustration 15.20

19 The charge temperature switch or sensor, used on 1981 through 1987 models with a feedback carburetor, monitors the air temperature of the air intake charge. It is located in the intake manifold. To test the charge temperature switch, turn the ignition switch off and disconnect the lead wire from the charge temperature switch.

20 On models equipped with a charge temperature switch, connect one ohmmeter lead to a good ground or the terminal ground (see **Illustration**) and the other lead to the center terminal of the switch. 21 On a cold engine, continuity should be indicated. If the charge temperature switch is cooler than 60-degrees F, resistance should be less than 100 ohms. If there is no continuity, the switch is defective and should be replaced. On a hot engine (normal operating temperature), the ohmmeter should indicate no continuity. If continuity exists, the charge temperature switch is defective and should be replaced.

Component replacement

22 The charge temperature switch (sensor) can be replaced by simply unthreading the component and installing the replacement. The charge temperature switch/sensor is located on the intake manifold, near the carburetor. To prevent a possible vacuum leak, put thread sealing compound on the threads of the new sensor before screwing it in.

Mixture control solenoid

Check

Refer to illustration 15.24

23 The function of the mixture control solenoid is to provide limited regulation of the fuel-air ratio of a feedback carburetor in response to the electronic signals sent by the computer. This is accomplished by metering the main fuel jets in the carburetor with the use of a plunger that extends into the fuel passage and shuts the fuel off (lean) and on (rich), allowing the fuel/air mixture ratio to change. By controlling the duration of this voltage signal, the ratio of power ON-time versus the

Detonation sensor

Check

Refer to illustration 15.29

27 Connect a timing light to the engine, start the engine and run it on the second highest step of the fast-idle cam (at least 1,200 rpm).

28 Connect a hand-held vacuum pump to the vacuum transducer (attached to the computer on the air cleaner) and apply 16 inches of vacuum. 29 Tap lightly on the manifold near the detonation sensor with the end of a wrench or screwdriver and confirm that the ignition retards not more than 11-degrees (see **illustration**).

30 If there is not any noticeable change in the timing, replace the sensor.

Replacement

31 Disconnect the electrical connector from the sensor and unscrew the sensor from the intake manifold. 32 Installation is the reverse of removal.